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RHETORIC OF FLAT DESIGN AND SKEUOMORPHISM IN APPLE'S iOS GRAPHICAL USER INTERFACE

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RHETORIC OF FLAT DESIGN AND SKEUOMORPHISM IN APPLE'S iOS

GRAPHICAL USER INTERFACE

BY

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OF

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ABSTRACT

This work sets out to examine the visual rhetoric located within flat and skeuomorphic iterations of Apple's iOS graphical user interfaces. I argue that design scholar Richard Buchannan is correct in his assertions regarding ethos, pathos, and logos in product design, but in this work I apply his ideas to Apple's iOS graphical user interface.

Buchannan suggests that much of the effectiveness of a product is based on that product's ability to appeal to the user, by way of these Aristotelian proofs. This examination of ethos, pathos, and logos also calls upon the work of anthropologist Thomas J. Schlereth; specifically, his idea that people's relationships to, and interpretations of objects are steeped in their relationships to the cultural and historical evolution of those objects.

Based on these theoretical frameworks I am examining how the ethos, pathos, and logos embedded within skeuomorphic and flat iOS interfaces is directly tied to the historical, technological, and cultural evolution of OS interface design. This thesis argues that the embedding of the aforementioned Aristotelian appeals in flat and skeuomorphic iOS interfaces was a rhetorical strategy implemented by Apple, to enhance the persuasive appeal of its iOS interfaces.

By examining these design techniques from this rhetorical perspective, I am looking to contribute new, but also concise perspectives to flat design/skeuomorphism discourses, which can be at times be multidirectional. I am also looking to contribute a rhetorical means by which future OS, and other technologies can be evaluated.

ACKNOWLEGMENTS

I would like to thank Dr. Ian Reyes for continually forcing me to think outside the box and challenge myself throughout this process. Your attention to detail always let me know that you were giving as much of yourself to this project as you expected of me. I would also like to thank Dr. Adam Roth, and Dr. Ashish Chadha for their intellectual contributions to this work, and also for their time.

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PREFACE

Design is a mix of craft, science, storytelling, propaganda, and philosophy.

Erik Adigard, 2001

CHAPTER 1: A BRIEF HISTORY OF iOS DISCOURSES

1.1 INTRODUCTION

In January of 2007 Apple Inc. unveiled its iOS operating system, which would be used to power its eagerly anticipated first generation iPhone. Since its release iOS has gone on to become a multi-platform operating system that powers many other hardware devices developed by Apple. This includes the iPod Touch, iPad, iPad Mini, Apple TV, Apple Watch and the CarPlay dashboard interface.

Upon the release of iOS, one of the early points of contention was Apple's implementation of a design technique called "skeuomorphism" into its graphical user interface. Though there is some semantic debate about this term (which will be discussed at length in chapter 2), within the context of this work skeuomorphism is defined as design based around elements that are ornamental in make-up and refer to previous, and potentially irrelevant analogs (Stevens, Robinson, & MacEachren, 2012). This design technique relied heavily on the use of visual embellishments like beveled edges, gradients, shadows, and reflections in applications and interface design. Examples of this included the iBook and Newsstand apps, which utilized digital, wood-grain textures in order to closely channel the looks and function of analog bookshelves (Zeman, 2012).

One of the most avid champions of this design technique was, then Apple CEO, Steve Jobs. He and Scott Forstall (then, the head of Apple's Human Interface Team) believed that this was necessary in order to bridge the gap between designer and user. Jobs argued that this technique added sentiment to devices, which included comfort and familiarity. Others have used words like 'gimmicky' and 'patronizing' to describe the

design technique (Downer, 2012). These competing schools of thought led to many debates about the usefulness/effectiveness of the design technique.

With skeuomorphic iOS the topic of much debate in the years following its initial release, it was no surprise that when it was announced in 2012 that Scott Forstall was stepping down, this led to speculation that skeuomorphism was leaving with him. Jony Ive would be announced as Forstall's replacement and sure enough, it was also announced that Apple was parting with its long-used approach to graphical user interface design, skeuomorphism. It would later be announced that Apple would begin to implement flat design in its user interfaces (which was already being employed by software competitors like Google and Windows).

Flat design is a technique that utilizes visual minimalism, while abstaining from textures and lighting effects in order to achieve simple shapes and flat colors within a user interface (Grief, 2013). Rather than relying on motifs and analogs of the past to connect with the user, flat design utilizes interface simplicity in order to create cognitive connections. This simplistic approach generally means ridding user interfaces of visual embellishments like beveled edges, gradients, shadows, and reflections, all of which happen to be staples of skeuomorphism (Campbell-Dollaghar, 2013). This led to some viewing these two design tech techniques in opposition. Of this view, many discourses were born, which pitted these two techniques against each other.

I argue in this work that as design techniques, skeuomorphism and flat design, as they pertain to iOS, are actually founded in many of the same rhetorical philosophies and ideologies. I also argue that when looking at these design techniques from a rhetorical

perspective, one can find many similarities between the two techniques. My claim is that both of these design techniques are founded on the Aristotelian appeals of ethos, pathos, and logos. Through these appeals, as implemented in skeuomorphic and flat versions of iOS, Apple looked to persuade users of the practical value that iOS powered devices had in their lives. In the next section I explain exactly what I mean by "rhetoric", as it pertains to this work. I also explain how I plan to examine the embedding of these persuasive appeals into iOS interfaces.

Image Set 1: iOS Skeuomorphic/Flat iOS Interface

Left to Right: Skeuomorphic iOS Interface, Flat iOS Interface [1]

[1]

[1] Retrieved March 15, 2015 from http://lunaweb.com/blog/tag/flat-design/

1.2 REVIEW OF LITERATURE/METHODOLOGY

Defining Rhetoric

My examination of iOS design rhetoric will specifically focus on design scholar Richard Buchanan's (1985) idea that the rhetoric of design is steeped in the Aristotelian proofs of ethos, pathos, and logos. Within this work the term rhetoric is specifically referring to these three proofs. These will all be located in iOS and analyzed through discourse that exists in regard to skeuomorphism and flat design.

The analysis of ethos will focus on Buchanan's idea that "Products have character because in some way they reflect their makers, and part of the art of design is the control of such character in order to persuade potential users that a product has credibility in their lives." (Buchanan, 1985, p. 14) The examination of pathos will focus on the idea that

> When emotion enters design, it is not an end in itself but a mode of persuasive communication that serves a broader argument. The problem for design is to put an audience of users into a frame of mind so that when they use a product they are persuaded that it is emotionally desirable and valuable to their lives. (Buchanan, 1985, p. 16)

 The exploration of logos will be centered on Buchanan's assertion that

> In essence the problem of technological reasoning in design is in the way the designer manipulates materials and processes to solve the practical problems of human activity. Products are persuasive in this mode when addressing real needs,

when they meet those needs in a reasonable, expedient way (Buchanan, 1985, p. 9).

Each of these persuasive appeals will be evaluated in both skeuomorphic and flat iOS. This will be done by examining the design of specific applications in iOS and critically analyzing what has been said about these apps regarding their ethos, pathos, and logos, as defined above. In doing this, I am not looking to settle the aforementioned debate about these two techniques; rather I look to examine the validity of my initial assertion that the two design techniques actually share many similarities, when looked at through a rhetorical lens.

This examination is also gounded in the theoretical assumptions of Material Culture Studies. What I mean is that I also posit in this work that much of the persuasive effectiveness of both skeuomorphic and flat iOS interfaces is found in the connection between the iOS user and their frame of reference, regarding the historical and cultural evolution of these design techniques.

The Material Culture of iOS

In "Material Culture Studies in America" anthropologist Thomas J. Schlereth (1982) describes Material Culture as "the study through artifacts (and other pertinent historical evidence) of the belief systems - the values, ideas, attitudes, and assumptions - of a particular community or society, usually across time," (p. 8). Schlereth, in that work, is examining the evidence of past and present cultural ideologies as interpreted through the examination of American artifacts. His view of material culture is founded on the idea

that artifacts act as a window to past culture, which could also be utilized to educate those in the present (Schlereth, 1982).

I argue in this work that the same can be applied to "digital culture", wherein past interfaces and applications would act as the artifacts, which shed light on contemporary interface and application culture, and trends. This is relevant because skeuomorphism (in reference to iOS) as a rhetorical agent relies on this same ideology. I argue that digital skeuomorphs in iOS are actually reliant on creating a connection between the user and Apple interface design trends/culture from the past and present (mainly within Mac OS). In this way people are better able to understand the interfaces of their iOS powered devices. Much of the persuasive appeal (. i.e. ethos, pathos, and logos) is found in this rhetorical strategy.

That said, this work also argues that versions of iOS, which implemented flat design (seven and eight), are also infused with this same ideology. Apple's version of flat design is steeped in the cultural and evolutionary history of flat interfaces. I argue that iOS flat design embeds ethos, pathos, and logos through cognitively linking the user to previously and currently existing flat interfaces (mainly those of Apple competitors Windows, and Google). It relies on a connection between the user, and their knowledge of historically flat interfaces.

In this way I argue that in both skeuomorphic iOS and flat iOS Apple utilizes skeuomorphism as a rhetorical strategy, in order to increase the persuasive appeal of its user interfaces. I also argue that when looked at from this perspective it is made obvious that many of the arguments for and against both of these design techniques are misguided.

This is important because it shows that in critically examining design through a rhetorical lens, one may find commonalties, which haven't been evident previously. This is not only important to the study of iOS design, but to the study of design in general.

In the next chapter of this work I will be examining the semantics of the term skeuomorphism. It is imperative that this be done before further discussion of the design technique. As mentioned earlier in this chapter there is semantic debate regarding the use of the term in reference to iOS (specifically versions one through six). Through examining the discourses surrounding this term, I hope to fully contextualize what the term means within the context of this work before further discussing it in relation to iOS.

In the following chapters, I will be examining how the rhetorical strategies implemented by Apple in all version of iOS fundamentally rely on many of the same ideas. In doing this I look to show that these two design techniques, which are seen as the antithesis of each other, are in many ways the same. This would mean that much of the combative discourse that has been born of juxtaposing them against each other may have be flawed.

CHAPTER 2: DEFINING SKEUOMORPHISM

2.1 THE SEMANTICS OF SKEUOMORPHISM

There is a major point of contention that must be addressed in order to more completely discuss skeuomorphism and flat design as they pertain to Apple's iOS operating system in upcoming chapters of this work. The use of the term "skeuomorphism" in discussions of Apple's design techniques in iOS versions one through six has been the subject of some semantic debate. This has been led by design scholar and critic Dan O'Hara, who is one of the foremost voices on the subject of skeuomorphism. O'Hara has published a plethora of papers on the topic, in addition to giving a variety of conference presentations. He argues that what is being described as skeuomorphism when discussing iOS is not actually skeuomorphism. This is because O'Hara and those who are following his lead contend that there are certain criteria that must be met in order for any object or design to be "truly skeuomorphic," and that these criteria were not met by Apple's designers in iOS. This specifically pertains to iOS versions one through six because these are the iterations of the iOS operating system that have been overtly labeled as skeuomorphic by Apple, designers, critics, and consumers alike.

In 2012, design critic Chris Baraniuk authored the article "How We Started Calling Visual Metaphors Skeuomorphs and Why the Debate over Apple's Interface Design is a Mess" for *TheMachineStarts.com.* This article is the result of an in depth interview that he conducted with Dan O'Hara. In the article O'Hara argues that in labeling their iOS applications as skeuomorphic, Apple is incorrectly using the term. He

laments that what Apple actually created were "visual metaphors" that mirror manual functionality in the digital space and not skeuomorphs in a traditional sense (Baraniuk, 2012; O'Hara, 2012). This argument is predicated on the idea that objects (or in this case applications) cannot be designed to be skeuomorphic; that one of the tenets of skeuomorphism is that it must occur organically over time. O'Hara tells Baraniuk:

> skeuomorphs are in fact things, like ornamental pot handles or human fingernails, which appear over time in later iterations of objects or species. Significantly, they are *directly* descended from an original functionality." (Baraniuk & O'Hara, 2012, p. 1)

Therefore, in purposely designing their applications to look like older or real-world equivalents, Apple's designers made a conscious design decision for aesthetic/stylistic purposes. This is why opponents like O'Hara argue that this makes Apple's use of the term skeuomorphism a stylized linguistic choice, which does not embody the "true" definition of skeuomorphism.

In this chapter I will be examining the use of the term skeuomorphism in a traditional sense, as well as the iOS-related use of the term. This will be done in order to see if there is any middle ground that can be found in the interest of upcoming chapters in which I will be examining the use of skeuomorphism, as related to iOS interface design.

2.2 TRADITIONAL DEFINITION

In her article "The Birth of Skeuomorph: A Terra Cotta Tajine and its Aluminum Counterpart", Georgina Russell (1991) writes about skeuomorphism, in reference to terra cotta cooking pots:

> Skeuomorphs are usually only recognised as such long after they originally occurred and only from such internal evidence as their form provides. (One may think of the way in which the shape of an ancient Greek pottery askos betrays its prototype of animal skin, though none of these survives.) In such cases one can only guess at the reason for the change in materials while the original shape was retained. (p. 1)

Russell's thoughts on what defines a skeuomorph closely mirror those of O'Hara. In her pottery example the material, and means of production of the pot have changed, but the shape is still a call to past functionality. That shape was once necessary for the pot to function (based on the materials available), but has since become the standard over time, even though that specific shape may no longer be necessary. That shape is representative of a past means of production. The argument is that there is a certain "evolutionary residue" (or the side-effects/ramifications of technological evolution) that is evident in "true" skeuomorphism. The look of the pottery can be traced back to certain historical and cultural roots. In understanding the current look, one might gain some insight on the past culture of which the pot derives. The pot is the physical link to a past culture. This way of defining skeuomorphism is steeped in the ideology material culture studies, as Thomas J. Schlereth described. What I mean by this is, the examples of skeuomorphism

provided by O'Hara and Russell focus on the cultural history of skeuomorphs; including their means of production/construction, and how those have changed over time, as tied to cultural shifts (Vannini, 2009). This lack of "evolutionary residue" is why people who ascribe to the O'Hara school of thought do not believe that Apple's use of the term skeuomorphism to describe their graphical user interface was correct; rather the term was adopted for lack of a better term to describe Apple's newly minted digital design techniques used in iOS (Baraniuk & O'Hara, 2012).

The argument is that what were described as skeuomorphic applications were nothing more that the digital mirroring of analog technologies for aesthetic purposes. They were not the authentic product of evolutionary residue; rather they were digital imitations of it. According to O'Hara regarding the traditional definition of skeuomorphism:

> The key point is that a skeuomorph, in the strict academic sense, cannot be designed into a new technology. In an already existing technology, though, skeuomorphs can certainly arise and become ornamented. However, the skeuomorph proper, being an accidentally evolved feature, must exist behind and before that ornamentation. (Baraniuk & O'Hara, 2012, p.1)

Once again this passage insinuates that the aforementioned evolutionary residue is the key to skeuomorphism in a traditional sense. According to this definition what we are seeing in iOS is not indicative of "traditional" skeuomorphism, but rather a newly minted semantic rendition of the term, which now encompasses decorative design.

In the next section I will be examining what I will call "iOS skeuomorphism."

This is the contemporary and newly popularized semantic use of the term.

2.3 iOS DEFINITION

As previously stated regarding iOS, some have voiced the opinion that in order
for an object or design to be truly skeuomorphic it must be the product of evolutionary
residue (or the side-effects/ramifications of technological evolution). It is also argued that
"true" skeuomorphs are derivative of previous functionality. Both of these points are
made evident in this excerpt from the article "Some Medieval and Post Medieval Pottery
from S.W. Scotland", which appeared in the *Glasgow Archaeological Journal*:

> The small jug from Paisley possibly belongs to the fourteenth century, though it
> could even belong to the fifteenth. The general type, squat and relatively
> unornamental, owes its form to the attempts of medieval potters to imitate the
> metal jugs that were coming into vogue at the time. Metal skeuomorphism can be
> seen more clearly in the jug, which contained the Pcnicuik (Midlothian) hoard of
> c. 1327. This jug is probably later as the angular profile has been softened out,
> and the handle (which rises above the level of the rim) and simple everted rim are
> both reminiscent of the two handled cooking pots that were coming into fashion
> in Scotland in the late fourteenth century (Laing & Talbot, 1974, p. 44)

Lang and Talbot cover both of the aforementioned points regarding skeuomorphism. The
first is that the jugs, even in their new clay form, are still a visual call to the functionality
of their metal predecessors. The clay jug mirrors what were once functional necessities in
the metal jug, as it imitates its form. Secondly it is evident that their evaluation of these
skeuomorphic pots and jugs are steeped in particular historical contexts. Laing and Talbot
are able to tie different types of jugs and pots to what was happening culturally in

Scotland, based on their means of production. These jugs tell a historical and cultural story, which is directly tied to how they were constructed. This is another example of evolutionary reside, existing within skeuomorphs. This is different from what many consider skeuomorphism as it relates to iOS.

Within the context of iOS skeuomorphism is essentially defined as making digital elements look like real-world objects. Wooden textures, torn paper and stitched ribbons are all examples of iOS skeuomorphism in action (Cronin, 2012). This is different from the aforementioned "traditional" definitions of skeuomorphism in that the traditional definition demands that the design of an object be derivative of past functionality and the result of evolutionary residue. The iOS definition seems to feature no such requirement. This is because according to the iOS school of thought on skeuomorphism, objects can be purposely designed to be skeuomorphic, just by mirroring the look and (sometimes) functionality of physical analogs. The argument here is that skeuomorphism, as it is used in reference to iOS, is a decorative design technique set in place, in part, to enhance user perceptions of functionality.

To put it simply, the iOS school of thought on skeuomorphism is steeped in the ideology that a design is skeuomorphic so long as it somewhat mirrors the looks and basic manual functionality of its real-world equivalent (Janssen, 2012). For example, when examining the design of the skeuomorphic Newsstand application that was in iOS, it is evident that the wooden texture of the bookshelf is more of a stylistic design decision than the evolutionary residue of analog bookshelves. *Forbes* contributor Tim Worstall writes about the Newsstand wooden texture:

It's a mental aid to us all: here's this new way of doing things but we'll remind

you, through design, of the old way you used to use so that you instinctively "get"

what is going on here (Worstall, 2013, p.1)

This is different than the clay pot that is designed with rivets, generations later, because it

is steeped in the aesthetic history of the metal pots that came before. This is argued to be

more of a conscious decision to make something that looks like an analog bookshelf to

enhance user experiences with iOS through familiarity. There is no tie-in to the

culture/history of the items being digitally mimicked. That evolutionary residue is

missing.

This call to familiarity seems to be the crux of the iOS definition of

skeuomorphism. Once again, I argue that the difference between iOS and traditional

skeuomorphism is that, in traditional skeuomorphism the idea of evolutionary residue

takes precedent. With iOS skeuomorphism what we see is the recreation of digital

representations of physical objects in an interactional medium, in order to persuade users

into feelings of familiarity.

Another example of this would be the iBook application in which books are

displayed digitally. One of the "skeuomorphic" techniques utilized by Apple in this

application was simply designing its book pages to appear slightly yellowed, in order to

give an aged look (Kenyon, 2012). Nothing about yellowed pages is directly descendent

of past book functionality, nor the residue of evolution; rather this seems to be a

decorative design choice that was made to enhance user sentiment. I argue that this was

designed into the application in order to give the digital book a less cold and

technological feel. This was also done in order to compete with the feeling of worn, aged analog books.

Next, I examine both of these takes on skeuomorphism in order to cultivate the definition of skeuomorphism that will be used throughout the duration of this work, as I examine the use of skeuomorphism as a rhetorical strategy to appeal to iOS users.

2.4 MIDDLE GROUND

In the previous two sections, I declared that the main point of contention in the semantic debate about Apple's use of the term skeuomorphism, in regard to iOS, is whether or not design can truly be considered skeuomorphic without being steeped in the residue of past functionality/evolution. Many say "no" and for that reason, many are against Apple's use of the term to describe its deigns in iOS versions one through six. That said, here I argue that Apple's version of skeuomorphism could in fact meet the requirements of traditional skeuomorphism. This is because in a sense, the design of some of the applications that were included in iOS could be argued as descendent of application designs from past Apple operating systems. In that way, they could actually be argued as the residue of Mac OS design evolution. They would be the product of cultural and historical shifts in the world of OS design.
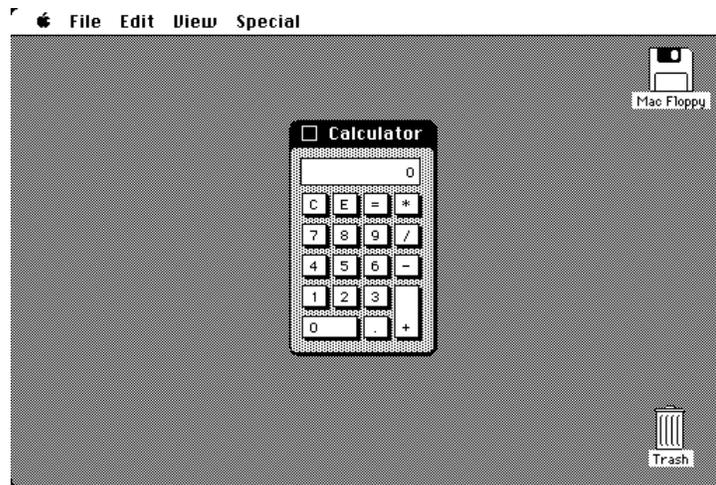
One of the earliest examples of skeuomorphism in an Apple interface is the calculator, which was a part of the graphical user interface for the Apple Macintosh in 1984. Today on the Mac (in OSX), as well as in iOS, the design is still basically the same, though it has evolved over the years in order to be integrated into the many versions of Mac OS and iOS. This calculator has evolved over time but still functions the same as it did in 1984. Even though the digital textures used to design the calculator have changed in the past 30 years, the application in its current form is still a reflection of the original calculator application. The application has been available to new generations of Mac OS users since its inception. It is steeped in the historical and cultural evolution of Mac OS design. I argue that just as you can look at a 14th century jug and tell what was happening historically and culturally in Scotland, one can look at a specific version of the

Mac OS calculator and better understand what was happening historically and culturally

in Mac OS design culture at the time of its release. It has arguably become a product of

evolutionary reside in that respect. In this way, over time, I argue that the iOS calculator

application has come to meet the requirements of a traditional skeuomorph. When the

Mac OS calculator app is re-appropriated for use in iOS, I argue that constitutes as

traditional skeuomorphism, for the iOS calculator is steeped in the evolutionary residue

of Mac OS and mirrors the same functionality of the Mac OS calculator. In this way it is

a skeuomorph.

        The interface aesthetics of iOS versions one through six are arguably the

result/residue of many generations and evolutions of Apple design. There is no reason

that it cannot be argued that some of the applications in iOS one through six were in fact

traditionally skeuomorphic. That said, the same can actually be argued for iOS versions 7

and 8. The flat aesthetics in those versions of iOS are also skeuomorphic in that they also

directly refer to historical and cultural trends in the world of OS design. Through this

connection, users are able to experience sentiments of familiarity. For that reason,

throughout the rest of this work, the definition of skeuomorphism I will be using is the

one that I founded in this section of this chapter.

        In chapter 3 I will be examining how Apple embedded ethos, pathos, and logos in

the iOS graphical user interface, through the implementation of skeuomorphism. In using

the definition that I have come up with in this chapter, I argue that Apple used

skeuomorphism as a rhetorical strategy in order to persuade users of the value of iOS and

iOS powered devices in their lives.

Image Set 2. Macintosh Calculator/iOS Calculator

Apple Macintosh Calculator Circa 1984

Left to Right: Skeuomorphic iOS Calculator, Flat iOS Calculator[2]

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[2] Retrieved March 15, 2015 from http://apple.stackexchange.com/questions/61113/front-facing-camera-stopped-working-on-the-iphone-4s

[4] Retrieved March 15, 2015 from http://9to5mac.com/2014/06/17/apple-seeds-update-to-os-x-yosemite-developer-preview/

CHAPTER 3: RHETORIC OF SKEUOMORPHISM

3.1 SKEUOMORPHISM IN THE iOS GRAPHICAL USER INTERFACE

This chapter will be founded on the definition of skeuomorphism that was cultivated in chapter 2. I argue that the implementation of skeuomorphism by Apple was a rhetorical strategy, utilized as a means of persuasion of iOS users. Users were being persuaded of the practical value of iOS. My examination of iOS design rhetoric will specifically focus on design scholar Richard Buchanan's (1985) idea that the rhetoric of design is steeped in the Aristotelian appeals of ethos, pathos, and logos. Within this work the term rhetoric is specifically referring to these three appeals. My argument is that skeuomorphism is an effective strategy in establishing ethos, pathos and, logos in the iOS graphical user interface; also that the ethos pathos and logos of skeuomorphism are found in the relationship between iOS users and the "evolutionary residue" that resides within iOS skeuomorphs.

These appeals will all be located in iOS and analyzed through discourses that exist regarding skeuomorphism within popular press and industry literature. Through my examination of the ethos, pathos, and logos of skeuomorphism in this section, I am looking to contribute a more organized and critical way of examining iOS design and OS design in general.

This chapter specifically focuses on the user interfaces of versions of iOS, which have been overtly labeled skeuomorphic. This includes iOS versions one through six. These are the versions of iOS, which came before the shift to flat design in iOS graphical user interfaces.

3.2 ETHOS

Within the context of this work ethos refers to design scholar Richard Buchanan's ideas on creating perceptions of credibility in product design. As highlighted in my literature review, Buchanan writes of ethos in product design in the following terms:

Products have character because in some way they reflect their makers, and part of the art of design is the control of such character in order to persuade potential users that a product has credibility in their lives (Buchanan, 1985, p. 14)

In this section I will be applying this idea of product/design credibility to the use of skeuomorphism in Apple's iOS interface, versions one through six. My assertion here is that through the use of skeuomorphism (as defined in chapter 2) as a rhetorical strategy, Apple was looking to create perceptions of credibility amongst users of its iOS powered devices.

When I use the term credibility, what I am referring to is the perception of reliability and validity tied to products that people use or come in contact with on a daily basis. In chapter 2 I argued that part of the reason that iOS versions one through six were skeuomorphic was because they were products of the historical and cultural evolution of Mac OS design. Skeuomorphic iOS applications also mirrored the functionality of the Mac OS applications that preceded them. They were, in that sense, traditionally skeuomorphic.

Here, I argue that the credibility of skeuomorphic iOS came from being the evolutionary product of older and familiar digital designs. These are designs that had already established their credibility in the lives of users. What I am referring to

specifically are digital designs that evolved over time to eventually be incorporated into the skeuomorphic iOS interface. These are designs, like the aforementioned calculator, which evolved over generations of Apple interfaces before they were incorporated into the iOS graphical user interface. The premise is that if a person finds their Mac OS to be credible in their lives, then because of the fact that skeuomorphic iOS iterations contain many similar elements and applications, it will be easier to find credibility in iOS powered devices.

In his piece "Skeuomorphism and the User Interface" Downer (2012) describes skeuomorphism by stating "If done right, things look and behave the same way as the real-life object they are based upon." (p.1) While Downer is referring to skeuomorphism as the digital mirroring of analog technologies in the iOS interface, I argue that the same principle can be applied to the digital mirroring of Mac OS applications in iOS.

In "doing it right" or executing skeuomorphism properly in user interfaces, designers must be able to establish an immediate link between the user and an application like a notepad app or a calculator, through calling upon familiar digital applications that the user may have come in contact with before. In the case of iOS the "familiar" digital applications would be those that have already existed in the Mac OS ecosystem and have evolved to the point of implementation in iOS.

The argument is that, through this close mirroring in appearance and functionality, users are more readily able to relate iOS applications to their historical digital ancestors. This in turn may help the user establish a rapport with the skeuomorphic iOS interface. In this way iOS skeuomorphs act as visual metaphors, which are aided by being the product of the historical, cultural evolution of Mac OS.

This is a design philosophy that was advocated for by Steve Jobs, early in his career. Jobs was well-known for his belief that a computer should be simple enough to navigate for everyone from a complete novice to a master. With this idea as the framework, Apple's interface applications would consistently be designed to reflect objects and designs that users would be familiar with (Hoy, 2012).

Upon the release of iOS in 2007, by way of the iPhone, the assumption in some design communities was that the general public was still largely unfamiliar with how to navigate the user interfaces of mobile touch-screen technologies. That said, there were plenty of Mac users who were familiar with the Mac graphical user interface, not to mention the fact that Apple had seen tremendous growth in Mac users since the release of the iMac in 1998 (Shontell, 2011). Through skeuomorphism Jobs and Fotstall wanted to create a sense of familiarity amongst new iOS users. At that time skeuomorphism was about giving a familiar look and feel to a novelty [the iPhone], and introducing a more gradual and comfortable transition for it (Allsop, 2013). I argue that, this was achieved through mirroring the look and functionality of previous Mac OS applications, that many users were likely already familiar with and already found credible.

Blogger Michelle Nyugen (2012) describes skeuomorphism stating, "Mimicking older, original design elements into something new gives the new design credibility. Old is the new "new""(p. 1).). I find this take on skeuomorphism, I find to be more representative of how ethos was established in iOS by way of mimicking older Mac OS applications and interfaces. iOS closed the "credibility gap" by referencing designs that have historically been utilized in Mac OS. In essence, Apple was looking to present the

future to their customers by way of the familiar past, also by way of designs that already meant something to those users; designs that were already credible to them.

For every critic and publication that applauded Apple's implementation of skeuomorphism, there were others who questioned if Apple was effective at all in establishing credibility, or if it could sustain such effect. As the years went on, one of the common anti-skeuomorphism arguments that developed was the idea that some of Apple's skeuomorphic references were dated. There was a sentiment held by critics of the technique that skeuomorphism had served its purpose of creating familiarity, and had possibly run its course. Kate Hoy (2013), a writer for *International Data Group* writes about this assertion:

> Apple's digital elements were designed to reflect real world items that users would be familiar with. Now this may have been a sensible theory 30 years ago, but today, are these skeuomorphic references out of date? (p.1)

This is a sentiment that has been mirrored by others, as well. *Gigaom* contributor Olof Schybergson (2012) commented:

> While skeuomorphism might have been beneficial in the early days of computing in helping less-tech-savvy types navigate a user interface, it now feels out of place in a world where most people are using a host of digital interfaces throughout the day, and where younger people have never even experienced physical rolodexes, paper shredders or giant desk calendars (p.1)

This observation begs the question What happens when the items that these skeuomorphic designs represent no longer hold any practical value to the average consumer and therefore can no longer be used as the catalyst for fostering digital design credibility?

I argue that when examining skeuomorphic iOS as it has been contextualized in the previous chapter (as the evolutionary residue of Mac OS), this assertion of skeuomorphic references "being out of date" becomes faulty. This is because skeuomorphism as defined in this work plays upon a user connection to/understanding of the past as a strength. Also, many of the skeuomorphic references that were designed into iOS were directly related to or descendent from contemporary Mac OS interfaces. For example, the same iconography that was used to represent the iTunes application in Mac OS X Leopard in 2007 was also used in iOS one, that same year. This would have made the skeuomorph completely relevant in bridging the "credibility gap" in iOS. The same can be applied to many other applications and icons in iOS and Mac OS throughout the run of skeuomorphic iOS. This is an example of how examining skeuomorphic iOS from a different perspective actually debunks much of the criticism which surrounded it.

In the next section I will examine the embedding of pathos in iOS versions one through six, through the implementation of skeuomorphism. What I mean specifically is the emotional appeal of skeuomorphic designs in iOS.

3.3 PATHOS

In the previous section I examined Apple's attempt at establishing ethos (or credibility) in iOS interface design, through the use of skeuomorphism, by mirroring the looks and functionality of applications and icons from the Mac OS. I argued that it was through familiarity with the Mac OS that users were able to find credibility in skeuomorphic iOS. In this section I examine the idea that in mirroring the aesthetics and functionality of the Mac OS, Apple was also trying to make an emotional appeal (or establish pathos) to the users of the iOS interface. Within the context of this section pathos refers to Buchanan's idea that:

> When emotion enters design, it is not an end in itself but a mode of persuasive communication that serves a broader argument. The problem for design is to put an audience of users into a frame of mind so that when they use a product they are persuaded that it is emotionally desirable and valuable to their lives. (Buchanan, 1985, p. 16)

Here, I will be examining the appeal of skeuomorphism as a vehicle through which the emotions of iOS users have been elicited and manipulated. This argument is once again steeped in the ideology that Apple appealed to users through an iOS interface that was the product of Mac OS "evolutionary residue". Apple was looking to make an emotional appeal to users of the iOS operating system, in order to create a deeper connection between it and the user.

Apple's attempt at emotionally appealing to consumers through skeuomorphism worked on two levels. I argue first that Apple was attempting to trigger cognitive schema,

related to older Mac interfaces. This created a sense of familiarity that evoked a connection between the iOS applications and those found in Mac OS. Second, I argue that Apple appealed to users of iOS emotionally by establishing a feeling of accomplishment amongst them. This was achieved by creating perceptions amongst users of "intuitively" mastering a new technology. This, of course, came by way of the familiar functionality that was created through the skeuomorphic relationship between iOS and Mac OS.

In regard to the latter of the aforementioned emotional appeals, the emotion evoked by intuitive design has long been a footnote in the discussion of the appeal of iOS. Although I will talk more about intuitive design in the next section (where I discuss logos), I wanted to touch on it here first; for it is argued to be a big part of the emotional appeal of skeuomorphism in iOS. Downer (2012) sums up this idea in his writings on the iBooks application. He comments:

> Apps that are super-graphical like iBooks look impressive, and are inviting to the customer in an Apple Store to pick up an iOS device and start flicking through the pages of a book, without having to read a manual or sit through a tutorial. This is a great example of making something feel intuitive because it looks and behaves just like a real book. It's a real novelty the first time someone uses it and it engages positive emotions in people (p.1)

There's a certain feeling of positivity and accomplishment that is evoked from a person being able to engage a "new" technology and feel that they have learned this technology in a matter of moments. The user is persuaded in those moments that the iOS interface is

one that they could continue to use. Once again, Downer is referring to skeuomorphism as it relates to mirroring the look and functionality of physical analogs. I argue that this same outcome may very well be the result of skeuomorphism as I eluded to it in chapter 2, and the previous section.

Michael Treavatt of the Gramercy Studios wrote about iOS skeuomorphism in his article *Semiotics and Mobile Devices.* For Treavatt:

> The Skeuomorphic icons are great for introducing a completely new device
> because you know what the button is going to do before you press it. It is less
> abstracted than iOS 7 and therefore requires less "education" for the message to
> be received (2013, p.1)

This quote is also relatable to skeuomorphism, as it has been appropriated for this work. In mirroring the look and functionality of Mac OS applications, the iOS interface presented a language that users were easily able to understand upon first contact. I posit that this leads to more positive emotional experiences, and increases the pathos of iOS.
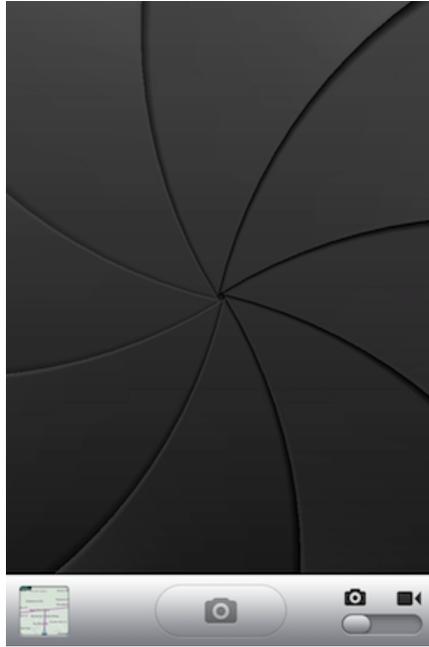
An example of this that comes to mind is the skeuomorphic camera application in iOS. Like others, this application called upon the functionality of Mac OS applications that came before it. Specifically, it mirrored the look and functionality of the Mac OS Photobooth application, and the iSight application. This included a solitary shoot button, a shutter that appeared on the screen when a photo was taken, and a built in auditory shutter-click sound. Anyone who had come in contact with Photobooth or iSight in the past would easily be able to notice the similarities in aesthetics and functionality, and therefore be able to more efficiently navigate the iOS camera application. In actuality the iOS camera could have easily functioned without any of the aforementioned aesthetic

embellishments, but I argue, those embellishments created a link between iOS and Mac OS. This is once again exemplary of Apple's attempt at establishing pathos within iOS through skeuomorphism.

As with the ethos there have been those who question whether or not Apple was successful in its attempt at establishing pathos in iOS. Some scholars (like those I mentioned earlier in this section) say that the skeuomorphic iterations of iOS were effective in channeling sentiments, and provoking emotions in users, while others would beg to differ. For example, when looking at the aforementioned camera application, we see that the counter-arguments regarding its sentiments and emotional appeal are very similar to counter-arguments that have been made in regard to credibility. We see this argument about iOS's skeuomorphic designs mirroring potentially irrelevant analogs rears its head again. Tom Kaneshige (2012) of *CIO* makes the observation, "a new generation that hasn't used a real camera with a mechanical shutter that clicks or hasn't read a lot of printed books might find skeuomorphic design unappealing." (p.1) This argument though, only holds weight, though when looking at skeuomorphism in iOS as the digital mirroring of analog technologies. In evaluating skeuomorphism as it pertains to this work, this criticism would fall short once again. The applications that the skeuomorphic iOS camera called upon (Photobooth at least) were still relevant throughout its lifespan.

In the next section of this chapter I will explore Apple's implementation of logos in skeuomorphic iOS iterations. This will focus on how skeuomorphism is tied to intuitive design and perceptions of logos in iOS.

Image Set 3. iOS Camera/Mac OS X Photobooth

iOS Camera Interface [3]

[3]Mac OS Photobooth Interface [4]

[3] Retrieved March 15, 2015 from http://apple.stackexchange.com/questions/61113/front-facing-camera-stopped-working-on-the-iphone-4s

[4] Retrieved March 15, 2015 from http://9to5mac.com/2014/06/17/apple-seeds-update-to-os-x-yosemite-developer-preview/

3.4 LOGOS

In section 3.3 I briefly examined how user perceptions of intuitive design, by way of skeuomorphism in iOS, acted as the catalyst for establishing pathos. Here I will further delve into the topic of intuitive design, but in this section the focus will be on how user perceptions of intuitive design in iOS are crucial in establishing logos. My exploration of logos in this section is predicated on Buchanan's assertion that a users perception of logos is centered on the ability of a product to address practical needs, in a convenient and logical manner. As previously mentioned, in *Declaration by Design* Buchannan asserts:

> In essence the problem of technological reasoning in design is in the way the designer manipulates materials and processes to solve the practical problems of human activity. Products are persuasive in this mode when addressing real needs, when they meet those needs in a reasonable, expedient way (Buchanan, 1985, p. 9).

Here, my examination of logos in skeuomorphic iOS is centered on the user expectation that a product or design should work in a way that makes their life easier, and fulfills the promise of its intended use. I argue that a much of the logos in iOS is steeped in the evolutionary residue of the Mac OS that resides in the iOS interface. What I mean by this is that many Mac OS applications provide their users with an expedient means to an end, and through inheriting much of the functionality of those Mac OS applications, iOS may be seen in the same light

As mentioned in the preceding sections, some of the reasons that skeuomorphism was implemented by Apple in iOS design were to create credibility by calling upon Mac OS applications with previously established credibility, as well to trigger schema and elicit the emotions of iOS users. This section argues that the third reason for Apple's implementation of iOS was to create an operating system that presented a logical and efficient means to an end for its users. Steve Jobs stated "Design is not just what [the product] looks and feels like. More importantly, design is how it works." (Walker, 2003, p.1) I argue that similarly to Apple's intent in creating perceptions of the ethos and pathos through skeuomorphism, its design goal in terms of the logos was to create a product that would be easy for a consumer to navigate and through which they could achieve their practical goals. I posit that much of this was achieved through the likeness in look and functionality to Mac OS applications, which many iOS applications closely mirror.

One of the more common arguments about the functionality of Apple products, especially those that powered by skeuomorphic iOS is that they are "easy to use." In 2012 *Time Magazine* contributor Tim Bajarin (2012) authored the article "6 Reasons Apple is so Successful." One of his main points in the article was perceived ease of use. He wrote about Apple and its products:

> This is what drove the company's user-interface designs from Day 1 and is still the mantra pushed to the software and hardware engineers every day they go to work. All of the products they create have to be intuitive and easy to understand and learn. As technology has become more intricate and users want more features, the task of keeping things simple is sometimes difficult. And Apple creates tools for power users and rookies, which can mean a broad range of ease-of-use issues.

But even with that, Apple is the only company I deal with where ease of use is

more important than the product itself. Apple makes this a critical goal of its

approach to creating anything for the market (p.1)

That perceived ease of use is important in establishing logos, in that it leads users to

believe that the product is conveniently addressing their practical needs. Skeuomorphism

in iOS was crucial in achieving this.

In *Semiotics and Mobile Devices*, Michael Trevatt also discusses ease of use as a

characteristic of Apple interfaces:

The skeuomorphic interface, up to iOS 6, was one of the easiest to learn (I mean

children under 5 were using it). Skeuomorphic basically means that the icon looks

like what it's representing. This includes textures, glows, bevels etc. Even the

buttons themselves have a shine on them to make them feel "buttony." (2013, p.1)

I argue that this was nothing new to iOS. This has been the calling card of Apple since

they began to implement visual metaphors in lieu of text command line interfaces. iOS

has inherited many of its attributes which lend to it "ease of use" from Mac OS which

came before it. All of the application attributes listed by Trevatt regarding iOS are

skeuomorphs that derive from Mac OS. This is, once again, the product of evolutionary

residue. I also argue that because of this, people were more apt to see their iOS-powered

device (like their Mac OS-powered devices) as something that could be used without

hassle to accomplish everyday tasks and goals.

In this chapter I have examined Apple's attempt at establishing ethos, pathos and logos in the skeuomorphic iterations the iOS graphical user interface, through mirroring the looks and functionality of their Mac OS applications. In the next chapter I will once again be exploring the appeal of iOS. This time, though, I will be examining iOS versions seven and eight. These are the iterations of iOS that that featured the successor to skeuomorphism flat design.

I argue that flat design was also skeuomorphic, when looked at by way of the definition of skeuomorphism that has informed this work. Through this I look to complete my critical analysis of both of these design techniques, and the discourses that surround them.

CHAPTER 4: RHETORIC OF FLAT DESIGN

4.1 FLAT DESIGN AS SKEUOMORPHISM

By 2010 the effectiveness of skeuomorphism as a design technique in iOS was being called into question by critics and consumers alike. Many of the anti-skeuomorphism arguments cited in the previous chapter of this work acted as the fuel for this shift in perception. As Austin Carr (2012), design and technology writer for *Fast Company* asserted about skeuomorphism, "traditional visual metaphors no longer translate to modern users" since many of the metaphors themselves refer to items that are "outmoded in the eyes of many"" (Carr, 2012, p.1). This was compounded by designers like Gadi Amit making assertions about the irrelevance of skeuomorphism. Amit stated: "these metaphors that were, in the early days of the computing revolution, relevant to assisting people in bridging the gap between the physical and digital worlds, are no longer necessary." (Hoy, 2013)

There was a fear that Apple, a company that earlier had been praised for its innovation in iOS, was falling behind. Arguments were made that competitors like Goolge and Windows had begun to catch up to, and even surpass Apple. What those competitors had in common was the successful implementation of flat design in their user interfaces.

In 2013, Apple "saw the light" and transitioned from skeuomorphism to flat design. In doing this Apple was trying to recapture the imaginations of their consumer base. I argue that to combat perceptions of "falling behind" Apple turned to an old, but familiar trick. In implementing flat design they were still relying on all of the same

rhetorical strategies that they had utilized in the implementation of skeuomorphism in iOS.

When looking at skeuomorphism as it was defined in chapter 2 of this work, I argue that in flat design Apple found another design technique through which they could use the power of skeuomorphism, while appearing as if they were headed in a new direction. This chapter argues that Apple's flat user interface was also steeped in the evolutionary residue of OS design. This time though, Apple wasn't mirroring/channeling its own past interfaces; instead it turned to their competitors who were gaining traction, and created an interface that included skeuomorphs of those competitors applications and their interface designs. In this way, skeuomorphism and flat design in iOS - two design techniques that are widely considered to be in dialectical opposition – are actually the same.

I argue in this chapter that Apple's implementation of flat design was centered on re-establishing ethos, pathos, and logos in iOS, through rhetorical strategies that were originated in their implementation of skeuomorphism.

4.2 ETHOS

As in chapter three, ethos in this chapter also refers to Richard Buchanan's assertions about product credibility. This section, though, focuses on Apple's attempts at embedding credibility in iOS, through the implementation of flat design. Here I explore Apple's reliance on previously established consumer interaction with flat aesthetics in order bolster familiarity with their newly implemented take on flat design in the iOS user interface. I argue that Apple's flat iOS interfaces are product of evolutionary residue, as it relates to the cultural rise of flat aesthetics in design. In this way Apple utilized a similar strategy in embedding ethos through flat design, as they did with skeuomorphism.

Before being implemented by Apple in iOS as a replacement for skeuomorphism, flat design was already a booming aesthetic trend that had been utilized by many other designers in a variety of other contexts. This means that many users of iOS could have already encountered some sort of flat layout. This may have been through the layout of a website that they frequented, mobile games that they had played, or through the interface of other mobile devices that they could have come in contact with (possibly Windows, or Google). I posit that in implementing flat design relatively late Apple gained an advantage in that a large number of their consumers would have already encountered flat interfaces. This would have meant that when Apple made the abrupt change from a skeuomorphic to a flat interface in 2013, flat design might have already been a familiar design technique to many iOS users.

There is a sentiment amongst some in the digital design community that Apple competitor, Microsoft was at the forefront of the "flat design revolution" when they

overtly introduced the design technique to much of the general public in 2011. Roman Po

of the tech blog *Hong Kiat* writes of the influence of Microsoft:

> While Microsoft didn't start the flat design trend (as much as Google started web
>
> search), I believe they were the ones who've made a big impact by virtue of the
>
> development and marketing of Windows 8 which has mandated every PC on the
>
> planet and its user to become accustomed to this new and unique interface (2014,
>
> p.1)

Many others immediately followed Microsoft's lead, including Google, which flattened

the design of its Android user interface. While Microsoft was being praised for

innovations in the graphical user interface space, Apple was being lampooned for falling

behind. Vocal critic of skeuomorphism, Tim Worstall (2012) of Forbes wrote, for

example:

> This is what designers are complaining/commenting about in iOS and comparing
>
> unfavourably with Windows 8. This skeuomorphism, this continued survival of
>
> what might have been useful archaisms but which, possibly, are becoming
>
> actually harmful rather than just charming reminders of the past (p.1)

What was once an aesthetically credible and innovative design scheme in skeuomorphism

was now the butt of many jokes in designer and consumer circles.

In order to combat this loss of perceived credibility that skeuomorphic iOS was

encountering Apple decided that they would "ride the wave." Flat design had already

been tested and proven as a viable and credible alternative to (now dated)

skeuomorphism, by those competitors who were already successfully implementing the design technique in their user interfaces.

That said; the same rhetorical principles that I applied in referring to iOS applications as skeuomorphs of Mac OS applications can be transferred to flat design. What I mean is that the applications within flat iOS could be considered the evolutionary residue of other flat interfaces become a big part of OS design culture. In this way, the interface/applications of flat iOS could actually be considered skeuomorphic. They would be skeuomorphs that are derived from Apple mirroring the looks and functionality of other flat interfaces.

When Apple's rendition of flat design was unveiled in 2013 through the release of iOS version 7, critics immediately recognized and spoke about similarities between the "new" flat iOS interface and other previously established flat interfaces. For example Po wrote about the iOS 7 interface:

> Apple just redesigned the look and feel of its new mobile version, iOS7, to have
> flatter and solid color tones compared to its old interface. iOS7 has taken some
> cues from Microsoft and Google using simpler icons, fresh type treatment and an
> overall flatter environment in this recent iPhone redesign (Po, 2014, p.1)

Others also noticed similarities between the looks and functionality of iOS 7 and other flat interfaces. In his article "Yes, iOS 7 Copies Windows Phone and Android – Get Used to it" for *InfoWorld* Galen Gruman (2013) writes about iOS 7:

> iOS 7 takes several notions from Android and makes them central to iOS: The
> Command Center is clearly based on the quick-access portion of the Android

notification tray, the new thumbnail view of running apps is also taken from

Android (which took it from WebOS and also has been adopted by Windows 8),

and the closing of apps by discarding them is taken from WebOS.

The new spartan "edge to edge" or "flat" look in iOS 7 – including the

typography cues -- is clearly inspired by Windows Phone, which broke ground

several years ago with an ultra-simple, clean, starkly refreshing design (p.1)

Gurman's criticism of iOS actually give the reader some insight into evolutionary history

of the flat aesthetics that iOS 7 calls upon in its interface. In this case Apple is drawing

from design techniques that were already successful in other interfaces. Once again, I

argue that this was an attempt by Apple to mirror interfaces which had already

established credibility in the lives of OS users. In other words, Apple was piggybacking

on the progress its competitors had achieved in the user interface space. This was an

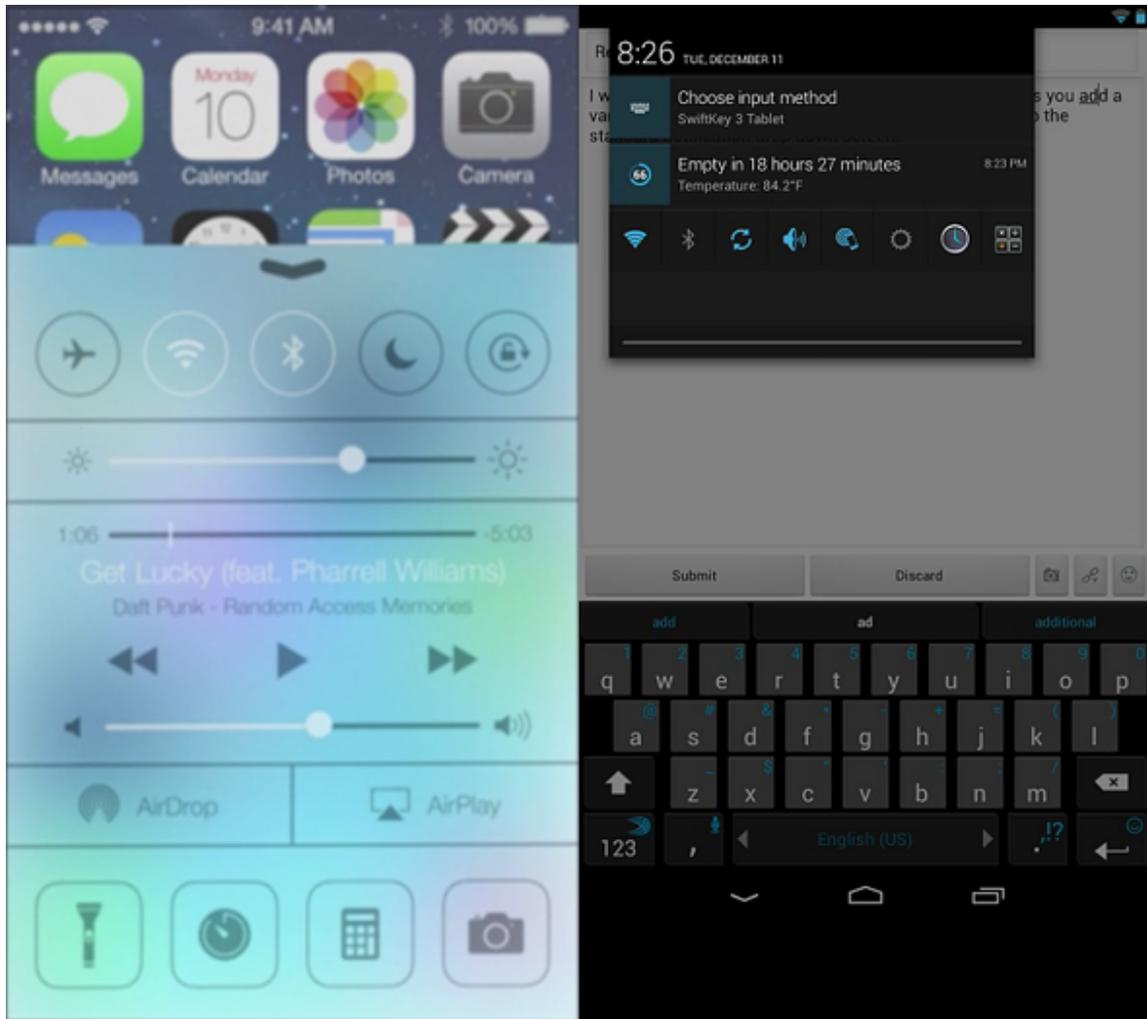attempt at re-establishing diminished ethos.

In the next section I will examine Apple's attempt at embedding pathos in the user

interface in flat iOS. What I mean specifically is the emotion that is triggered by flat

designs in iOS. I will be looking at the emotional appeal of Apple's designs as well as

how those designs have been emotionally received.

Image Set 4: iOS 7/Windows Phone 8

Left to Right: iOS 7, Windows Phone 8[1]

4

Image Set 5: iOS 7/Android 7

Left to Right: iOS 7, Android 7

5

4.3 PATHOS

Mirroring chapter three, this section will focus on Apple's attempt at embedding pathos in flat iOS. This section is also predicated on Richard Buchanan's assertions regarding pathos in product design. In this section, I argue that through the simplicity of flat design, Apple was looking to emotionally appeal to their iOS user base. This too, is founded on the idea that Apple's flat interface was actually composed of flat applications that were skeuomorphs of previously existing flat applications.

In their article "Facets for Simplicity for the Smartphone Interface: A Structural Model", design scholars Junho Choi, and Hye-Jin Lee argue that in recent years 'simple and easy" has further established itself as the zeitgeist for mobile user interface design (Choin and Lee, 2012). This assertion is predicated on the idea that through the perceptions of simplicity fostered by aesthetic minimalism, consumers are more easily able to relate to products and at a faster rate (Choin and Lee, 2012). Simplicity is often considered to be a catalyst for, or determinant of user satisfaction. It is argued that mobile device users will experience greater levels of satisfaction when they have a positive evaluation of a user interface. (Wolfinbarger and Gilly, 2001)

I argue that the aforementioned sentiments about simplicity in interface design were the foundation of Apple's attempt at connecting with their customers emotionally, through flat design. The idea is that if the user of a product can establish a basic level of understanding early in the relationship with the iOS powered device, turn this will lead to

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[5] Retrieved March 15, 2015 http://www.businessinsider.com/apple-copied-android-in-ios-7-2013-6#like-on-android-multitasking-on-ios-now-shows-a-preview-of-each-running-application-2

an emotionally positive outcome for the consumer.

In the previous section, I argued that the applications in flat iOS could be viewed as skeuomorphs that are derived of the evolutionary residue of already established flat interfaces. In continuing to explore that idea, I posit that in being skeuomorphs of previously established flat interfaces, this also may have added to the perceived ease of use of the flat iOS interface. If users of iOS are already familiar with other flat interfaces, then flat iOS being a skeuomorphic product of those interfaces could add to its ease of use. That ease of use would then potentially trigger positive emotions in the user. Paul Hekkert (2004), the chairman of the Design and Emotions Society states that "it is no longer sufficient to design good products or services; we all want to design experiences and generate pleasurable or exciting sensations." (p. 445) This, I assert, is the rhetorical strategy of Apple, in implementing flat skeuomorphs.

Choi and Hye (2012) also write about the correlation between interface simplicity and user satisfaction:

> The mechanism between simplicity and aesthetic perception can be found in processing fluency theory. Processing fluency theory posits that aesthetic pleasure is a function of the user's stimulus processing dynamics (Reber et al., 2004). That is, the more fluently users can process interface stimuli, the more positive their aesthetic evaluation.

> Referred to as the ease of processing visual objects, fluency is affected by figural goodness, the amount of information, symmetry, clarity, contrast, and the familiarity of visual objects (Lavie and Tractinsky, 2004; Moshagen and Thielsch,

High fluency leads to a positive judgment because users can recognise and process stimuli more successfully with fewer errors and less uncertainty (p.2)

Choi and Hye do a great job of explaining the allure of a design technique like flat design through fluency theory. In transitioning to flat design and toning down the visual embellishments of their previous interfaces, Apple was looking to rely more on the "symmetry, clarity, and contrast"; staples of flat design. That said, once again, I must argue that a major part of this allure in flat iOS came from the applications in it being skeuomorphs, which mirror the look and functionality of other previously established flat applications. In this way, Apple's strategy is really no different than what was done with Mac OS to increase pathos in skeuomorphic iOS.

One of the major criticisms of Apple's implementation of flat design may also be one of the reasons that Apple was able to create the perception of simplicity, and therefore increase user feelings of satisfaction. Upon the release of iOS 7 many complained that what Apple had implemented not really flat design, but rather a toned down version of its previously skeuomorphic interfaces. Carrie Cousins (2013) of the tech blog *Design Mondo* writes:

> Apple did go a long way toward flattening the design scheme with the removal of beveled edges and multiple gradients within each element, but it still stresses components and parts that create some 3D effects and depth (p.1)

While Apple heavily simplified their user interface, they did still leave some distinct traces of the old interface around. This may have acted as a call to familiarity for Apple consumers who were used to the older interface making their initial interactions with the

new interface easier, and therefore more pleasant. This would also allow previous iOS users to more easily derive meaning from the "new interface." Michael Trevatt (2013) gives an example of this when discussing the icon for the calendar application. He writes:

> Let's look at the calendar icon. The skeuomorphic design resembles a physical calendar. The flat design has no embellishment at all and has been abstracted to its most basic elements. Our experience or "education" with the original icon allows us to understand the flat design. It has become symbolic. (p.1)

I definitely see a valid, and possibly rhetorical strategic reasoning behind why Apple may have purposely not deviated too far away from skeuomorphic iOS in some of their flat applications. With the example of the calendar icon, the icon has been flattened but still very much resembles the icon of old. This allows for continuity with veteran iOS users, and an easier time deriving meaning from the new interface.

I argue here that Apple's flat interface is actually dually implementing skeuomorphs that mirror the looks and functionality of some of their older iOS applications, while still mirroring the aesthetics of established flat interfaces. In this case Apple would be covering all of its bases in its attempt at creating an interface that is easy to use, and thus leads to increased user satisfaction.

In the next section of this chapter I will explore appeals of logos in flat iOS iterations. This will center on arguments for and against the practical usefulness of the design technique.

4.4 LOGOS

In this section I examine the logos of flat design in iOS. This will once again be predicated on Buchanan's assertions regarding logos in product design. As in the previous section, much of focus will be on the simplicity of flat design. Here I argue that through the perceived simplicity of flat design, Apple intended to persuade users of iOS that the operating system was conveniently addressing their practical needs. Once again I argue that this sense of convenience was based on the ability of the user to easily derive meaning from a flat iOS interface, which implemented many design elements users were already familiar with. In that way, this rhetorical strategy for embedding logos is identical to that of iOS one through six.

When discussing pathos I focused on Apple implementing simplified designs in order to increase perceptions of intuitive usability amongst iOS users. This was meant to enhance user satisfaction through the positive emotional response that comes along with perceived product mastery. Those same designs are also tied to Apple's implementation of logos in flat iOS. Since logos (at least as Buchanan describes it in relation to design) is predicated on the idea that designs are persuasive when people feel that products are conveniently addressing their practical needs, that means the simplistic approach of flat design not only evokes positive emotions from users but also gives them confidence in the practical usefulness of a product. I posit that it is this user perception of practical usefulness that Apple was looking to increase through their implementation of flat aesthetics in the iOS 7 interface. Once again, this was achieved by way of implementing a flat interface, which contained many skeuomorphs derived from other notable flat

interfaces. I argue that due to this, consumers could more easily interpret the flat iOS interface, and therefore more easily use it to accomplish tasks.

As was my assertion when discussion logos in iOS one through six, I argue the embedding of logos in flat iOS was based around the fundamental idea that users should be able to understand the navigation process, just by looking at the interface. I posit that Apple's implementation of skeuomorphic flat icons could definitely lead to this. At the very least, Apple was mirroring flat interfaces which that already established themselves practically in the lived of their users.

In the article "iOS7 Steals From, Stomps on Competitors", Sacha Segan (2013) writes about iOS 7:

> iOS 7's design borrows a lot from Microsoft's Windows Phone 8. The flatness, the focus on large fonts and sliding panels, even the fonts themselves; you see a lot of Windows Phone 8's much cleaner, more "modern" approach. (p.1)

Windows Phone 8 was one of the main flat interfaces that Apple was accused of drawing "inspiration" from. Described as "incredibly easy to use and understand", and "a breath of fresh air in the smartphone world" (Gordon, 2013, p.1) it is no surprise that many of the skeuomorphs found in iOS 7 come from the Windows Phone 8 interface. As in chapter 3, I argue that this ease of use and navigation was one of the rhetorical strategies that Apple was looking to embed in its flat interface. Because of the abundance of things that people accomplish in their daily lives through iOS powered devices, this notion of ease in accomplishing tasks is crucial to their perception of logos in the iOS user

interface. Through the implementation of flat design skeuomorphs, Apple may have been able to increase this perception.

The next and final chapter of this work will be a synthesis of the previous two chapters. In concluding this work I will be looking at the ways in which all versions of iOS are skeuomorphic. I am also looking to explore what this all means for the future of operating system design, and design in general.

CHAPTER 5: DISCUSSIONS

5.1 SYNTHESIS

More than anything else, what I looked to accomplish in this thesis was to present a new way of looking skeuomorphism and flat design, in reference to iOS. This work was born of the idea that the discourses that surrounded these two design techniques were at times superficial, and misguided. Due to that I looked to find a uniform, and rhetorical approach to evaluating these design techniques. Through this rhetorical examination I found that these two design techniques – which are often argued to be in complete opposition – are actually the same in terms of many of the rhetorical strategies they rely on. Although only one of the design techniques is overtly called "skeuomorphism" it turned out that they were both skeuomorph-driven digital interfaces, when looked at by way of my rhetorical philosophy. I argued that the skeuomorphic properties of both of these design techniques were the foundation of how they appealed to users, rhetorically. Through skeuomorphism the ethos, pathos, and logos (or persuasive appeal) of both of these design techniques was strengthened.

For example, when examining both skeuomorphism and flat design in iOS I argued that they were both actually able to establish themselves as credible in the lives of users through skeuomorphism. In iOS one through six this credibility was predicated on iOS applications being designed as skeuomorphs that mirrored the look and functionality of Mac OS applications, which had already established themselves as credible in the lives of users. In the case of iOS seven and eight, this credibility was founded on applications in Apple's flat user interface being skeuomorphs of flat OS features which had already established themselves as credible in other mediums. Basically, Apple implemented the

same rhetorical strategy in both design schemes. This is a point that was could only be found by taking a more critical look at these design techniques. This is where the previous discussions of these design technique failed.

Through my examination of both of these design strategies, I was able to argue that both also relied on their skeuomorphic interfaces to emotionally appeal to iOS users (or establish pathos). Through the skeuomorphic interface of iOS one through six, Apple once again relied on skeuomorphs, which were derivative of Mac OS interfaces to create a UI that was easier to navigate. In doing so, this made for an interface, which was emotionally appealing. The same rhetorical strategy was adopted in iOS seven and eight, through the implementation of skeuomorphs, which were derived from popular flat interfaces of Apple competitors, like Windows and Google.

Finally, in looking at both of these design techniques through a rhetorical lens I was able to argue that they both relied on skeuomorphism as a way of establishing logos in their interfaces. Once again, through perceptions of simplicity triggered by the implementation of skeuomorphism as a rhetorical strategy, both of these design techniques were able to convince users that their interfaces were a practically useful means of accomplishing tasks in their everyday lives.

In many ways I found the rhetorical strategies implemented in all versions of iOS to be very similar. When looking at both skeuomorphic iOS and flat iOS from this perspective it is easy to see how they were both implemented by Apple to achieve many of the same goals through user interactions. Both of these design techniques are steeped in the cultural residue of OS culture, and are strengthened by user relationships to historical OS technologies. In essence, what I found is that for two design techniques that

are often argued to be in dialectical opposition, they do certainly have a lot in common. Once again, I argue that this is where the discourses pertaining to these design techniques have fallen short. Critics and the public have failed to look at these design techniques from a critical perspective. In this work I look to provide a theoretical foreground, by which future discussions of OS can be fostered. That said, for what this work was able to accomplish, I also believe that there are many ideas that are left to be explored regarding iOS.

Specifically, I believe that this concept of "evolutionary reside" could benefit from further examination. This could be the subject of its own study or analysis regarding the history of OS design and OS culture. It's a topic that I feel I skimmed in this work, but an independent exploration of the historical and cultural intangibles that shape user interactions with OS interfaces could also go a long way in figuring out what the future holds in the area of operating system design.

5.2 THE FUTURE

I would be remiss if I didn't speculate on where the future of OS design may be headed. Wearable technology looks to be the next frontier for operating system design but far from the final frontier. As I finish this work, Apple is on the verge of releasing its Apple Watch. This device is leading the way into a future that may see wearable technology become a part of everyday life for many, in the same way that touch-screen mobile technologies have. One of the main points of discussion regarding the Apple Watch is the user interface, and how it will function exactly. Not much is known at the moment, besides that Apple will certainly implement some variation of flat design. In his article "How Flat Design Made the Apple Watch Possible" John Browlee (2014) of *FastCo Design* writes about flat design in the Apple watch:

> Flat design was the iWatch's secret weapon all along. And beyond the Apple Watch, flat design also paves the way to new Apple products we've scarcely even begun to dream about. (p.1)

All throughout the article, Brownlee speculates about how flat design may be the design technique that ushers in "the future." I argue, however, as informed by the theoretical assumptions of this work, that the future of OS design will be greatly influenced by the past. Even in design technologies that usher in the future, I argue that the evolutionary residue of the past will be a major driving force.

It is important that users of technologies maintain a connection to and understanding of the culture and history of technological evolution, because that history will certainly inform the future of OS design. Whether we're talking about OS in a car,

house, or even people, all of this will certainly be steeped in a certain evolutionary residue.

Having said that, no one knows if flat design will still be the "go-to" design technique in 20, 10 or even 5 years; nor if iOS will even still exist in at that point. Regardless of where operating system design is headed, I assert that it is important to have an organized and critical way of evaluating and discussing these trends. This is what I looked to accomplish through the rhetorical approach that I applied throughout this work. In a world where more and more avenues are arising for people to have their voices and opinions heard, this rhetorical approach for evaluating design strategies could be exactly what is needed. That is what I hope I have accomplished in this work.

BIBLIOGRAPHY

Allsopp, A. (2013). *iOS 6 vs iOS 7 app comparison guide: see how the designs have changed*. *Digital Arts*. Retrieved 11 March 2015, from http://www.digitalartsonline.co.uk/news/mobile-creativity/see-how-app-designs-have-changed-in-move-from-ios-6-ios-7/

Bajarin, T. (2012). *6 Reasons Why Apple Is Successful*. *TIME.com*. Retrieved 16 March 2015, from http://techland.time.com/2012/05/07/six-reasons-why-apple-is-successful/

Baraniuk, C. (2012). How We Started Calling Visual Metaphors "Skeuomorphs" and Why the Debate over Apple's Interface Design is a Mess - The Machine Starts. Retrieved from http://www.themachinestarts.com/read/2012-11-how-we-started-calling-visual-metaphors-skeuomorphs-why-apple-design-debate-mess

Bronner, S. J., Prown, J. D., Vlach, J. M., Upton, D., Roberts, W. E., Noble, A. G., ... & Schlereth, T. J. (1985). Material Culture Studies: A Symposium.*Material Culture*, 77-114.

Brownlee, J. (2013). *How Flat Design Is Preparing iOS For The Gadgets Of Tomorrow*. *Co.Design*. Retrieved 26 March 2015, from http://www.fastcodesign.com/3020586/how-flat-design-is-preparing-ios-for-the-gadgets-of-tomorrow

Buchanan, R. (1985). Declaration by design: Rhetoric, argument, and demonstration in design practice. *Design Issues*, 4-22.

Carr, A. (2012). *Will Apple's Tacky Software-Design Philosophy Cause A Revolt?*. *Co.Design*. Retrieved 26 March 2015, from http://www.fastcodesign.com/1670760/will-apples-tacky-software-design-philosophy-cause-a-revolt

Choi, J., & Lee, H. (2012). Facets of simplicity for the smartphone interface: A structural model. *International Journal Of Human-Computer Studies*, *70*(2), 129-142. doi:10.1016/j.ijhcs.2011.09.002

Cousins, C. (2013). *New Apple Look Doesn't Fully Embrace Flat Design - Designmodo*. *Designmodo*. Retrieved 26 March 2015, from http://designmodo.com/new-apple-not-flat/

Cronin, S. (2012). *Skeuomorphism in Interface Design - Tuts+ Web Design Article*. *Web Design Tuts+*. Retrieved 26 March 2015, from

http://webdesign.tutsplus.com/articles/skeuomorphism-in-interface-design--webdesign-7638

Daniels, M. (2013, April 4). Front facing camera stopped working on the iPhone 4s. Retrieved February 3, 2015, from http://apple.stackexchange.com/questions/61113/front-facing-camera-stopped-working-on-the-iphone-4s

Downer, C. (2012, November 22). Skeuomorphism and the User Interface by @cjdowner — Realmac Blog. Retrieved from http://realmacsoftware.com/blog/skeuomorphism-and-the-user-interface

Evans, C. (2013). *A Eulogy for Skeuomorphism. Motherboard*. Retrieved 9 March 2015, from http://motherboard.vice.com/read/a-eulogy-for-skeumorphism

Green, R. (2012). *Design jargon explained: Skeuomorphism | App design | Creative Bloq. Creativebloq.com*. Retrieved 16 March 2015, from http://www.creativebloq.com/app-design/jargon-skeuomorphism-812538

Greif, S. (2013). Flat Pixels: The Battle Between Flat Design And Skeuomorphism. Retrieved from http://sachagreif.com/flat-pixels/

Gruman, G. (2013). *Yes, iOS 7 copies Windows Phone and Android -- get used to it. InfoWorld*. Retrieved 26 March 2015, from http://www.infoworld.com/article/2611537/ios/yes--ios-7-copies-windows-phone-and-android----get-used-to-it.html

Gurman, M. (2014, June 17). Apple seeds update to OS X Yosemite Developer Preview. Retrieved February 2, 2015, from http://9to5mac.com/2014/06/17/apple-seeds-update-to-os-x-yosemite-developer-preview/

Hachman, M. (2012). *Apple's Skeuomorphic Designs: On the Way Out?. PCMAG*. Retrieved 9 March 2015, from http://www.pcmag.com/article2/0,2817,2411659,00.asp

Heisler, Y. (2013). Apple's iOS 7 icons are ugly and a step backwards | Network World. Retrieved from http://www.networkworld.com/article/2224806/wireless/apple-s-ios-7-icons-are-ugly-and-a-step-backwards.html

Hildenbrand, J. (2013). Apple's iOS 7 'copied' everyone - and that's a good thing. Retrieved March 27, 2015, from http://www.androidcentral.com/apple-s-ios-7-copied-everyone-and-s-good-thing

Hoy, K. (2013). *Apple and the Death of Skeuomorphism. Idgconnectmarketers.com*. Retrieved 13 February 2015, from http://www.idgconnectmarketers.com/blog-abstract/7353/apple-death-skeuomorphism

Janssen, C. (2012). What is Skeuomorphism? - Definition from Techopedia. Retrieved
April 2, 2015, from http://www.techopedia.com/definition/28955/skeuomorphism

Kaneshige, T. (2012). *Apple Management Shakeup: The End of Virtual Wooden
Bookshelves?*. *CIO*. Retrieved 26 March 2015, from
http://www.cio.com/article/2390709/consumer-technology/apple-management-shakeup--
the-end-of-virtual-wooden-bookshelves-.html
Kenyon, J. (2012). *INDUSTRY INSIGHT: Designers comment on the iOS UI | Design |
Creative Bloq. Creativebloq.com*. Retrieved 20 March 2015, from
http://www.creativebloq.com/design/industry-insight-designers-comment-ios-ui-
712433

Kosner, A. (2014). *iWatch, CarPlay And iHome Will Lead To A Simpler Design
Sensibility In Apple's iOS 8. Forbes*. Retrieved 14 March 2015, from
http://www.forbes.com/sites/anthonykosner/2014/05/31/iwatch-carplay-and-
ihome-will-lead-to-a-simpler-design-sensibility-in-apples-ios-8/

Laing, L. R., & Talbot, E. J. (1974). Some Medieval and Post Medieval Pottery from SW
Scotland. *Glasgow Archaeological Journal*.

Lima, A. (2013). [Atualizado] O iOS 7 da Apple inegavelmente se inspirou em algumas
coisas do Windows Phone | Windows Team. Retrieved March 2, 2015, from
http://www.windowsteam.com.br/o-ios-7-da-apple-inegavelmente-se-inspirou-
em-algumas-coisas-do-windows-phone/

Leibowitz, B. (2013). *Friday Debate: Flat Design vs. Skeuomorphism. Solar VPS*.
Retrieved 11 March 2015, from http://www.solarvps.com/blog/friday-debate-flat-
design-vs-skeuomorphism/

McDonagh, D., Hekkert, P., van Erp, J., & Gyi, D. (Eds.). (2004). *Design and emotion*.
CRC Press.

Nyugen, M. (2013). *Skeuomorphism Web Design to Improve Learning?*. Retrieved 10
March 2015, from
http://thingskidslike.tumblr.com/post/51809544028/skeuomorphism-web-design-
to-improve-learning

Palvus, J. (2013). Why Jony Ive Is Flattening iOS 7 | Co.Design | business + design.
Retrieved from http://www.fastcodesign.com/1672780/why-jony-ive-is-
flattening-ios-7

Po, R. (2014). *A Look at Microsoft, Google and Apple's Approach to Flat Design.
Hongkiat.com*. Retrieved 12 March 2015, from
http://www.hongkiat.com/blog/google-apple-microsoft-flat-design/

Pursell, C. W. (1983). The history of technology and the study of material culture. *American Quarterly*, 304-315.

Qamar, A. (2014). *Basic Principles of Flat Design - And Resources to Get You Started!. Web Design Professionals - 1stWebDesigner*. Retrieved 18 March 2015, from http://www.1stwebdesigner.com/flat-design-principles/

Redström, J. (2006). Persuasive design: Fringes and foundations. In *Persuasive Technology* (pp. 112-122). Springer Berlin Heidelberg.

Russell, G. (1991). The Birth of Skeuomorph: A Terra Cotta Tajine and Its Aluminium Counterpart. *Journal of Museum Ethnography*.

Russell, K. (2013). 7 Ways Apple Copied Android In iOS 7. Retrieved March 2, 2015, from http://www.businessinsider.com/apple-copied-android-in-ios-7-2013-6#ios-now-lets-you-quickly-access-settings-like-wi-fi-and-bluetooth-with-a-control-panel-a-feature-android-has-had-for-a-while-3

Sanders, K. (2013). *Skeuomorphism – A brief blog about one aspect of graphic user interfaces and psychology.. Evans, C. (2013). A Eulogy for Skeuomorphism. Motherboard. Retrieved 9 March 2015, from http://motherboard.vice.com/read/a-eulogy-for-skeumorphism*. Retrieved 8 March 2015, from Evans, C. (2013). A Eulogy for Skeuomorphism. Motherboard. Retrieved 9 March 2015, from http://motherboard.vice.com/read/a-eulogy-for-skeumorphism

Schybergson, O. (2012). *Skeuomorphism is (finally) dead: So what is Apple's next design move?. Gigaom.com*. Retrieved 16 March 2015, from https://gigaom.com/2012/11/03/skeumorphism-is-finally-dead-so-what-is-apples-next-design-move/

Segan, S. (2013). iOS 7 Steals From, Stomps On Competitors | News & Opinion | PCMag.com. Retrieved from http://www.pcmag.com/article2/0,2817,2420200,00.asp

Shontell, A. (2011). *The Amazing Story Of How Steve Jobs Took Apple From Near Bankruptcy To Billions In 13 Years. Business Insider*. Retrieved 26 March 2015, from http://www.businessinsider.com/how-steve-jobs-took-apple-from-near-bankruptcy-to-billions-in-13-years-2011-1

Sikora, L. (2015). *Why Flat Design is Trending | Lunar Logic - go further. Lunarlogic.com*. Retrieved 26 March 2015, from http://lunarlogic.com/node/135

Skeuomorphic iOS Interface, Flat iOS Interface. (2015). Retrieved from http://lunaweb.com/blog/tag/flat-design/

Stevens, J. E., Robinson, A. C., & MacEachren, A. M. (2013). Designing Map Symbols for *Mobile Devices: Challenges, Best Practices*, and the Utilization of Skeuomorphism. In *26th International Cartographic Conference*.

Trevatt, M. (2014). *SEMIOTICS & MOBILE DEVICES. Gramercy Studios*. Retrieved 20 March 2015, from http://blog.gramercystudios.com/semiotics-mobile-devices/

Vannini, P. (Ed.). (2009). *Material culture and technology in everyday life: Ethnographic approaches* (Vol. 25). Peter Lang.

Walker, R. (2015). *The Guts of a New Machine. Nytimes.com*. Retrieved 20 March 2015, from http://www.nytimes.com/2003/11/30/magazine/the-guts-of-a-new-machine.html

Worstall, T. (2012). *The Real Problem With Apple: Skeuomorphism In iOS* - Forbes. Retrieved from http://www.forbes.com/sites/timworstall/2012/09/12/the-real-problem-with-apple-skeuomorphism-in-ios/

Zeman, E. (2013). *Apple iOS 7 Delayed, But New iPhone Won't Be* - InformationWeek. Retrieved from http://www.informationweek.com/mobile/mobile-devices/apple-ios-7-delayed-but-new-iphone-wont-be/d/d-id/1109365

Zeman, E. (2014). Apple Loses iOS Designer Greg Christie - InformationWeek. Retrieved from http://www.informationweek.com/mobile/mobile-applications/apple-loses-ios-designer-greg-christie/d/d-id/1204333